

Serial No: 09/964.301

Attorney Docket #P04278US5

Amendment To The Claims

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Claim 1 (Currently amended): A pole ~~means~~ and base for holding ~~a structure~~ an array of pre-aimed, high intensity light fixtures in an elevated position comprising:

concrete
a base ~~means~~ having a length including a lower section adapted for insertion into the ground
and including a lower section and an upper section adapted to extend above the ground when
the base is inserted in the ground;

a pole ~~section means~~ having a length adapted for mateable slip-fitting over at least a portion of
the upper section of the base, ~~means and~~ having a lower open end, an interior bore
extending axially and inwardly from the lower open end, and ^{interior bore} ~~(the lower end)~~ having an
inside diameter generally matching the ^{outside} ~~inside~~ diameter of the upper section of the base
means, the length of the pole being substantially longer than the length of the base; and
an array of pre-aimed light fixtures mounted to ~~said~~ ^{one or more} cross arms;
a connection member adapted to connect the array at or near the upper end of the pole; and
means a portion of the base adapted to ~~for~~ positioning the lower open end of the pole section-
means, when slip-fitted onto the base means, above the ground but generally nearer the
ground ^{than} ~~the~~ upper end of pole when the pole is installed in operative position on
base.

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Claim 2 (Currently amended): The pole ~~means~~ of claim 1 wherein the base ~~means~~ is made from concrete.

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Claim 3 (Currently amended):
made from hollowed concrete.

The pole ~~means~~ of claim 2 wherein the base ~~means~~ is

Claim 4 (Currently amended): The pole ~~means~~ of claim 1 wherein the base ~~means~~ includes a cylindrically shaped lower portion.

Claim 5 (Currently amended): The pole ~~means~~ of claim 1 wherein the base ~~means~~ includes a frusto-conically shaped upper section.

Claim 6 (Currently amended): The pole ~~means~~ of claim 1 wherein the upper section of the base means includes a tapered upper section and a lower section and the means said portion for positioning comprises the tapered upper section of ~~means and to co-act with a~~ generally matching tapered interior bore of the pole ~~section means~~.

Claim 7 (Currently amended): The pole ~~means~~ of claim 1 wherein the upper section of the base ~~means~~ is tapered at 0.14 inches across the diameter of the base ~~means~~ per foot in height.

Claim 8 (Currently amended): The pole ~~means~~ of claim 1 wherein the upper section of the base ~~means~~ is always a plurality of feet above ground.

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Claim 9 (Withdrawn): The pole means of claim 1 wherein the upper section of the base means has generally straight sided sidewalls, and the pole section means has a matching generally straight sided interior bore, the means for positioning including a stop member means positioned on said base means which limits the distance the pole section means can slip fit onto the base means.

Claim 10 (Currently amended): The pole ~~means~~ of claim 1 wherein width and length of the base ~~means~~ is related to required strength, height, and weight of the pole ~~means~~ and structure attached to the pole ~~means~~.

Claim 11 (Currently amended): The pole ~~means~~ of claim 1 wherein the pole section ~~means~~ is made from metal.

Claim 12 (Currently amended): The pole ~~means~~ of claim ~~11~~ wherein the pole section ~~means~~ is hollow.

Claim 13 (Currently amended): The pole ~~means~~ of claim 1 wherein the pole section ~~means~~ is tapered along its entire length.

Claim 14 (Currently amended): The pole ~~means~~ of claim 13 wherein the pole has an elongated frusto-conical shape.

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Claim 15 (Currently amended): The pole means of claim 13 wherein the taper is approximately 0.14 inches in diameter per foot of length.

Claim 16 (Currently amended): The pole means of claim 1 wherein the interior bore is slightly larger than the outside diameter of the upper section of the base means.

Claim 17 (Currently amended): The pole means of claim 1 wherein the slip fit between the base means and a pole section means locks the pole section means in place by resilient and frictional locking.

Claim 18 (Currently amended): The pole means of Claim 1 further comprising wherein the pole comprises a plurality of pole sections means, onea lowermost pole section means being slip fittable over the upper section of the base means, additional pole sections means slip fittable, in succession, sequentially on thea preceding pole section means.

Claim 19 (Currently amended): The pole means of claim 1 wherein the pole section means includes mounting means upon which can be connected the structurearray to be elevated.

Claim 20 (Withdrawn): The pole means of claim 1 further comprising openings in the base means and pole section means to allow access to the interior of the base means and pole section means.

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Claim 21 (Currently amended): A method of rigidly suspending ~~a structure~~ an array of pre-aimed, high intensity light fixtures in an elevated position comprising the steps of:

forming an upper section in a base having a length and a lower section ~~means~~ which is adapted to be mounted in the ground;

positioning the upper section of the base above the ground when the base ~~means~~ is mounted in the ground;

forming in a bottom portion of a pole, having a length, ~~section~~ a bore mateably slip fittable over the upper section of the base ~~means~~, the length of the pole being substantially longer than the length of the base;

attaching to the pole an array of pre-aimed light fixtures mounted on one or more cross arms;

slip fitting the pole ~~section~~ to the base ~~means~~ so that the lower ~~section~~ portion of the pole ~~section~~ is above but generally nearer the ground than the top of the pole when the pole is installed in operative position on the base.

Claim 22 (Currently amended): The method of claim 21 further comprising positioning a stop ~~means~~ on one of the base ~~means~~ and pole ~~section~~ for determining the distance upon which the pole ~~section~~ slip fits over the base ~~section~~.

Claim 23 (Currently amended): The method of claim 21 wherein the bore of the pole slips ~~under~~ over the upper section of the base ~~means~~ to mount the pole ~~section~~ to the base ~~means~~.

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Claim 24 (Currently amended): The method of claim 21 wherein the upper section of the base means is tapered and the bore in the pole section is tapered to mateably match.

Claim 25 (Currently amended): The method of claim 21 wherein the base means is made of reinforced concrete.

Claim 26 (Currently amended): The method of claim 21 wherein the pole section is made of tubular metal.

Claim 27 (Currently amended): The method of claim 21 comprising the step of matching the diameters and lengths of the base means and pole section according to pre-determined, required strength, height, and weight of the pole section and the array structure attached to the pole section.

Claim 28 (Currently amended): The method of claim 21 ~~further wherein the pole~~ comprising positioning one or more additional pole sections each having a bore in a bottom portion and a upper section so that each pole section can be sequentially slip fit to each preceding pole section.

Claim 29 (Withdrawn): The method of claim 21 comprising the further step of slip fitting a first pole section to the base means, slip fitting any further pole section to a preceding pole section to preassemble one or more pole sections and the base means:

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grasping the preassembled combination at approximately at or above the center of gravity;
moving the base means into a previously excavated hole in the ground;
bringing the preassembled combination to a generally upright position;
adjusting the preassembled combination to plumb the preassembled combination; and
filling the excavated hole to secure the preassembled combination in the plumb position.

Claim 30 (Currently amended): The method of claim 21 further comprising the steps of:
moving the base means to a pre-excavated hole in the ground; adjusting the base means so
that it is generally plumb; filling the remaining areas of the excavated hole with material to
secure the base means in the hole; and
slip fitting said pole section to the base means.

Claim 31 (Currently amended): The method of claim 21 further comprising the steps of:
moving the base means to a pre-excavated hole in the ground;
adjusting the base means so that it is generally plumb;
~~filling~~filling the remaining areas of the excavated hole with material to secure the base means
in the hole; and
slip fitting a ~~first~~ pole section to the base means.

Claim 32 (Withdrawn): The method of claim 30 wherein the base means is moved to the
excavated hole by fixing a carrying strap through a bore in the center of the base means and by
a crane means lifting the base means and placing it into the excavated hole.

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Claim 33 (Withdrawn): The method of claim 30 wherein the step of moving the base means into the excavated hole comprises:

forming a bore laterally through the base means generally perpendicular to the longitudinal axis of the base means;

slidably inserting an elongated bar through the bore, the bar having opposite ends which extend outwardly on each side of the base means;

grasping each end of the bar with a lifting and motive means; and

moving the base means over and into the excavated hole.

Claim 34 (Withdrawn): The method of claim 33 wherein the bar allows the base means to swing freely in a first plane so that the gravitational pull on the base means plumbs the base means in that plane.

Claim 35 (Withdrawn): The method of claim 34 further comprising first and second vertical jack means each having a base which can be placed on the ground, and an upper end associated with the bar to raise and lower one side of the bar to level or plumb the base means.

Claim 36 (Withdrawn): The method of claim 35 wherein the jack means comprises an upper end having a v shape to receive the bar.

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Claim 37 (Withdrawn): The method of claim 35 wherein the jack means includes a vertically extending elongated member which slidably passes through a vertical bore in the bar means.

Claim 38 (Withdrawn): The method of claim 34 further comprising a second bar means extending through a bore laterally through and generally perpendicular to the longitudinal axis of the base means, second bar means being adaptable to receive a jack means at opposite ends to fix the base means in a plumb position.

Claim 39 (Withdrawn): The method of claim 34 further comprising a second bar means extending through a bore generally perpendicular to the longitudinal axis of and laterally through the base means, and generally perpendicular to the first bore, the first and second bores having an intersection location whereby the diameter of the first and second bores overlap at least in part so that the second bar abuts against the first bar to provide a balance point for the base means, the balance point containing all the weight of the base means at generally a small abutment of curved surfaces of the first and second bars to provide a self plumbing device.

Claim 40 (Withdrawn): The method of claim 34 further comprising a sleeve having an inside diameter greater than the outside diameter of the first bar and surrounding the first bar, the sleeve including generally at its mid-section generally coincident with the longitudinal axis of the base means one or more balance notes extending inwardly towards the longitudinal

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axis of the sleeve and onto which the first bar would abut, the balance nodes providing generally most of the gravitational pull for the base means at that general location to provide a self plumbing means for the base means.

Claim 41 (Withdrawn): The method of claim 30 wherein the base means is plumbed by utilizing a level means.

Claim 42 (Withdrawn): The method of claim 41 wherein the level means comprises an elongated level having first and second ends, one of said first and second ends having attached to it an extensive member, the extension member having a transfer link from the level means selected so that the angle formed between a line from the other of said ends of the level to the outer extended end of the extension member, in comparison with the edge of the level would be equal to the angle formed by a taper in the upper section of the base means.

Claim 43 (Currently amended): A method of rigidly suspending an array of pre-aimed high intensity light fixtures mounted on one or more cross arms in an elevated position comprising:

determining the ~~needs~~ structural requirements of a pole ~~structure~~ of over thirty feet tall by

considering one or more of the set comprised of height, weight, and distribution of the

~~one or more members which are to be suspended~~ array;

determining the ~~needs~~ structural requirements of a base means having a length substantially

shorter than the pole to support the pole by considering one or more of the following

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set comprised of the set ~~regarding determining the needs~~ structural requirements of the pole, type of ground, type of mounting of the base in the ground, and stresses at or around the base when installed in the ground means;

selecting a configuration for the pole means from one or more of the set comprised of structural requirements of the pole, number of sections of the pole means, shape of each section, length of each section, largest diameter of each section, sheet thickness and gauge of each section, steel tensile strength of each section, type of steel of each section;

selecting a configuration of the base ~~means by considering from~~ one or more of the set comprising ~~the set used in selecting the~~ structural requirement of the base, configuration of the pole means, diameter of the base means, amount of the base means covered by the pole means when connected, ~~type of concrete used in the base means, treatment of the concrete used in the base means, and~~ ~~re-bar structure used in the base means, wall thickness, stress, type of steel, joint strength, shipping considerations, ground type, and length of taper~~; and constructing a pole having a lower end and an upper end ~~means of desired configuration of the base and pole section or sections according to the selected determinations~~ configuration of the pole;

constructing a base having a lower section and an upper section according to the selected configuration of the base;

fixing ~~one or more cross arms the array~~ to the pole means;

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~~attaching an array of pre-aimed light fixtures to said cross arm or cross arms~~ installing the lower section of the base in the ground with the upper section extended above the ground;

slip fitting the lower end of the pole to the upper section of the base so that the lower end of the pole is held above the ground but nearer the ground than the upper end of the pole.

Claim 44 (Currently amended): A system for rigidly elevating an array of pre-aimed high intensity light fixtures mounted on one or more cross arms at a site comprising:

~~one or more~~ at least one base means for positioning having a lower section installed below ground in a desired predetermined locations in the ground at the site;

~~each base means~~ having a length and a upper section which extends above ground when the lower section of the base means is mounted installed in the ground;

~~one or more a pole section means for each base means, the pole having a length for suspending the elevated structure an array of light fixtures to a desired height, each pole section being having a hollow lower end and having an upper and lower ends, a first pole section means the lower end of the pole being adapted to be slip fittable over the upper section of the a base means and additional pole section means successively slip fittable over preceding pole section means but maintain the lower end of the pole above the ground but nearer the ground than the top of the pole;~~

a connection adapted to mount an array to a pole.

~~means for locking each pole section into position; and means for raising the locked pole sections with the structure attached into vertical position.~~

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Claim 45 (Currently amended): The system of claim ~~wherein the means for further~~
comprises a locking to lock the pole to the base, the lock comprising includes a substance
coated on at least one of the upper sections of the base ~~means~~ and the lower end ~~interior~~ of the
pole ~~sections means~~.
